U.S. COAST GUARD

Electronic

Maintenance

Procedure

Cards

U.S. COAST GUARD

Overview

- The Team
- Purpose of Project
- Current State of Aviation Maintenance
- Scope of Project
- Additional Improvements
- Recommendations
- What We Need From You
- Feedback

U.S. COAST GUARD

The Team – Over 121 years of Aviation experience

- Mr. Fred Hunter, ATIMS Project Manager
- SCPO Dave Perham, ATTC Non-Resident Training
- CPO Skip Smith, ATTC H65 AMT School
- CPO Jim Brandt, ATTC Performance Systems Branch
- CPO Jim Wallace, ATTC Performance Systems Branch
- PO Dan Lupton, ARSC H65 Tech Services
- PO Jeff Wood, ATTC Performance Systems Branch
- Ms. Mary Lane, ATIMS Senior Systems Analyst

U.S. COAST GUARD

Purpose of Project

The purpose of the project is to demonstrate how we can

"make maintenance easier for the technician in the field"

by providing an electronic Maintenance Procedure Card (MPC) that is continuously improved and links the user to relevant information that will ensure task accomplishment.

U.S. COAST GUARD

Current State of Aviation Maintenance

- Operational demands increasing
- Technical specialization decreasing
- Experienced technicians decreasing
- Training requirements increasing
- Text is difficult to follow
- Figures and graphics do not show adequate detail

U.S. COAST GUARD

Current State of Aviation Maintenance

- Experienced mechanics continuously interrupted
- QA is younger, less experienced
- QA bombards Tech Services or Prime Unit with questions
  - 1 - 800 - MPC - HELP

U.S. COAST GUARD

Scope of Project

Enhance communication of maintenance information

U.S. COAST GUARD

Scope of Project

- Timely-continuous updating of maintenance information
- User friendly design
- Right-time, right-place delivery

U.S. COAST GUARD

Scope of Project (continued)

- Linking to references
  - Providing less research time by users
  - Less distractions, less interruptions
  - More time on task
- More troubleshooting aids
  - Making use of data already captured (i.e., ACMS data, trouble-shooting charts)

U.S. COAST GUARD

Scope of Project (continued)

- Drop-down aids for the sign-off card
- Card is adaptable to different skill and experience levels of the users
- Development cost avoidance at ATTC
- Just-in-time training
- Refresher training

U.S. COAST GUARD

Additional Improvements

- One source of expert information utilized in classroom training, field training and field performance
  - Combines job aid with training aid
  - Allows Trainers to spend more time on training tasks using correct doctrine instead of creating “work-arounds”

U.S. COAST GUARD

Additional Improvements (continued)

- e-MPC follows the Instructional Systems Design (ISD) model by putting our resources into “fixing the job aid” before developing training implementations
- Aircraft availability and safety
- Reduce wasted resources due to unnecessary 265 parts generation

U.S. COAST GUARD

Additional Improvements (continued)

- Reduces unnecessary calls to Technical Services/Prime Unit
- Provide distance learning opportunities to all users

U.S. COAST GUARD

Recommendation

- Create an e-MPC by
  - Converting existing SGML MPC data to XML
  - Creating style sheets for XML presentation on the web and CDROM
  - Creating simple links and media that will pass through SWIII limitations
  - Collaboratively identify links for user
  - Creating links to “standard practices”

U.S. COAST GUARD

Recommendation

- Demonstrate an e-MPC to illustrate
  - Presentation enhancements
  - How a change to an e-MPC can flow faster through the existing change process
  - The time and cost avoidance over the existing process using existing resources
  - The benefits to Coast Guard Aviation communities.

U.S. COAST GUARD

What we need from you

- Willingness to improve existing processes
- Permission to continue
- Recommendations

U.S. COAST GUARD

Feedback